

The claims are amended as follows:

1. (currently amended) A differential plating medium for the detection of Salmonella ~~Salmonella~~ bacteria from a sample likely to contain Salmonella ~~Salmonella~~ bacteria and other bacteria, said other bacteria releasing the enzyme beta-galactosidase on exposure to a substrate in the plating medium, comprising a mixture of (1) a carbohydrate that is a metabolic source for Salmonella ~~Salmonella~~ bacteria, the metabolic reaction between Salmonella ~~Salmonella~~ bacteria and the carbohydrate releasing acid into a portion of the medium of the reaction, (2) a pH indicator dye that changes the color of said portion of the plating medium to a first color different from the color of the medium responsive to a change in the pH of said portion of the medium, (3) a first substrate that does not react with Salmonella ~~Salmonella~~ bacteria but reacts with the enzyme beta-galactosidase to produce a second color in the medium where it is acted upon by the enzyme beta-galactosidase, the second color contrasting with the first color and the color of the medium, (4) a second substrate that does not react with Salmonella ~~Salmonella~~ bacteria but reacts with to the enzyme beta-galactosidase to produce said second color in the medium where it is acted upon by the enzyme beta-galactosidase, the first substrate reacting with the enzyme beta-galactosidase in a significantly shorter time than the second substrate, whereby colonies of said other bacteria contain the second color, and (5) an ingredient for thickening the mixture in sufficient quantity to solidify the mixture, wherein the first substrate and the second substrate are selected from the group consisting of 5-bromo-4-chloro-3-indoxyl-beta-D-galactopyranoside, 5-bromo-6-chloro-3-indoxyl-beta-D-galactopyranoside, 3-indoxyl-beta-D-galactopyranoside, 6-chloro-3-indoxyl-beta-D-galactopyranoside, 4-nitrophenyl-beta-D-galactopyranoside, 2-nitrophenyl-beta-D-

galactopyranoside, 5-iodo-3-indoxyl-beta-D-galactopyranoside, 4-methylumbelliferyl-beta-D-galactopyranoside and N-methylindoxyl-beta-D-galactopyranoside.

2. (currently amended) A differential plating medium for the detection of Salmonella~~Salmonella~~ bacteria from a sample likely to contain Salmonella~~Salmonella~~ bacteria and other bacteria comprising the medium of claim 1, wherein the carbohydrate is one or more members of the group consisting of 2-deoxy-D-ribose, xylose, mannitol, dulcitol, sorbitol, L-rhamnose and D-arabitol.

3. (canceled)

4. (currently amended) A differential plating medium for the detection of Salmonella~~Salmonella~~ bacteria from a sample likely to contain Salmonella~~Salmonella~~ bacteria and other bacteria comprising the medium of claim 1, wherein the first substrate is 5-bromo-4-chloro-3-indoxyl-beta-D-galactopyranoside, and the second substrate is 3-indoxyl-beta-D-galactopyranoside.

5. (currently amended) A differential plating medium for the detection of Salmonella~~Salmonella~~ bacteria from a sample likely to contain Salmonella~~Salmonella~~ bacteria and other bacteria comprising the medium of claim 2 in combination with an inhibitor selected from of the group consisting of bile salt, bile salt #3, tellurite, sodium novobiocin and cefsulodin.

6. (currently amended) A differential plating medium for the detection of Salmonella~~Salmonella~~ bacteria from a sample likely to contain Salmonella~~Salmonella~~ bacteria and other bacteria comprising the medium of claim 1 in combination with a chromogenic substrate enhancer.

7. (currently amended) A differential plating medium for the detection of Salmonella~~Salmonella~~ bacteria from a sample likely to contain Salmonella~~Salmonella~~ bacteria and other bacteria comprising the medium of claim 6, wherein the chromogenic substrate enhancer consists of at least one member of the group consisting of isopropyl-

beta-D-thiogalactopyranoside, ~~to~~ 1-O-methyl-beta-D-galactopyranoside, methyl ethyl-beta-D-thiogalactopyranoside, and methyl-beta-D-thiogalactopyranoside.

8. (canceled)

9. (currently amended) A differential plating medium for the detection of Salmonella~~Salmonella~~ bacteria from a sample likely to contain Salmonella~~Salmonella~~ bacteria and other bacteria comprising the medium of claim 1, wherein the carbohydrate is 2-deoxy-D-ribose and the first and second chromogenic substrates are 5-bromo-4-chloro-3-indoxyl-beta-D-galactopyranoside and 3-indoxyl-beta-D-galactopyranoside, respectively.

10. (currently amended) A differential plating medium for the detection of Salmonella~~Salmonella~~ from a sample containing Salmonella~~Salmonella~~ and a plurality of other bacteria that release the enzyme beta-galactosidase upon exposure to a mixture consisting essentially of (1) at least one carbohydrate that is metabolizable by Salmonella~~Salmonella~~ and is of the group consisting of 2-deoxy-D-ribose, xylose, mannitol, dulcitol, sorbitol, L-rhamnose and D-arabitol, the metabolic reaction between the carbohydrate and Salmonella~~Salmonella~~ bacteria releasing acid into a portion of the medium of the reaction, (2) a pH indicator dye that changes the color of said portion of the plating medium to a first color responsive to a change in the pH of the medium, (3) a first chromogenic substrate that does not react with Salmonella~~Salmonella~~ bacteria and changes the color of the medium to a second color responsive to the presence of the beta-galactosidase enzyme, (4) a second chromogenic substrate that does not react with Salmonella~~Salmonella~~ bacteria and that changes the color of the medium to approximately the same second color and that is responsive to the presence of the beta-galactosidase enzyme, the first substrate reacting with the beta-galactosidase enzyme more quickly than the second substrate, and the first and second colors contrasting with each other and with the color of the medium, wherein the first substrate and the second substrate are selected from the group consisting of 5-bromo-4-chloro-3-indoxyl-beta-D-galactopyranoside, 5-bromo-6-chloro-3-indoxyl-beta-D-galactopyranoside, 3-indoxyl-beta-D-galactopyranoside, 6-chloro-3-indoxyl-beta-D-galactopyranoside, 4-nitrophenyl-beta-D-galactopyranoside, 2-nitrophenyl-beta-D-galactopyranoside, 5-iodo-3-indoxyl-beta-D-

galactopyranoside, 4- methylumbelliferyl-beta-D-galactopyranoside and N-methylindoxyl-beta-D-galactopyranoside, and (5) an ingredient for thickening the mixture in sufficient quantity to solidify the mixture.

11. (currently amended) A differential plating medium for the detection of Salmonella~~Salmonella~~ bacteria from a sample likely to contain Salmonella~~Salmonella~~ bacteria and other bacteria comprising the medium of claim 10, wherein the ingredient for thickening the mixture is agar.

12. (currently amended) A method of detecting the presence of Salmonella~~Salmonella~~ in a sample that is likely to contain Salmonella~~Salmonella~~ bacteria and other bacteria, comprising the steps of inoculating the plating medium of claim 1 with the sample, thereafter incubating said plating medium for a sufficient period to obtain colonies of bacteria producing one or more of said colors, and examining the plating medium for colonies of said first color.

13. (currently amended) The method of claim 12 wherein the carbohydrate is one or more members of the group consisting of 2-deoxy-D-rRibose, xylose, mannitol, dulcitol, sorbitol, L-rhamnose and D-arabitol.

14. (canceled)

15. (amended) The method of claim 12 wherein the plating medium includes a chromogenic substrate enhancer.

16. (canceled).